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FOREST PRODUCTS RESEARCH IN PICTURES

NO. 44

BOX TESTS SHOW NEED FOR GOOD GLUING



OCT 1928

FOREST PRODUCTS LABORATORY

U. S. FOREST SERVICE

MADISON, WISCONSIN

This attachment for the Forest Products Laboratory's vibration test machine gives lock-corner wooden boxes a shearing impact like that received in transit in the special piling which some shippers must use in loading their product. The box is weighted and hung between roller guides almost touching the vibrating table, in a sling of metal straps. As the platform rolls backward and forward the 2-inch cleats bolted to it strike the ends of the box near the bottom and give the same sort of impact as would be received from adjoining layers of boxes in the starting or stopping freight car. This test imitates in particular the sort of shock received by boxes blocked with 2-inch material. The box in the picture has failed along a glued joint in the side. The operator is pointing to a divided crayon mark which shows the extent of the offset.

Tests of boxes having glued-up sides show that there is little economy in the use of cheap glues and careless gluing in box manufacture. Highly serviceable box sides of this type can be made if glues of even average grade are used carefully. Glued joints in opposite sides of the box should not be placed at the same level if shearing effects are to be minimized.

Photograph by Forest Products Laboratory, U. S. Forest Service



